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28 May 2015

Mr. John Nordine
U.S. EPA Region 5
RCRA Enforcement and Compliance Assurance Branch (LU-9J)
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: Central Wire, Union, Illinois Monthly Progress Report for March 2015, Revision 1

Dear Mr. Nordine:

Enclosed please find Revision 1 of the Monthly Progress Report for the Central Wire facility located in Union, Illinois for the month of March 2015, revised in response to EPA comments.

The eDMR for the groundwater pump and treat facility and the laboratory analytical reports, which includes the effluent data used in the eDMR for March 2015, are also attached to this report.

If you have any comments or questions regarding the progress of this project, please contact me at (262) 237-1130.

Sincerely,

Autumnwood ESH Consultants, LLC

John W. Thorsen, P.E.

JWT:jt

encl

cc:	Joyce Munie	IEPA
	Robert Kay	USGS
	Thomas Hanewald	Central Wire
	Gerald W. Ruopp	Central Wire
	Robert Johnson	Central Wire

MONTHLY PROGRESS REPORT
Central Wire Union, Illinois Site
March 2015

1. **Progress Made This Reporting Period** – This reporting period Central Wire continued the operation and maintenance of the groundwater extraction and treatment (pump & treat) system. Central Wire treated an average of 465,000 gallons per day with a maximum daily flow of 468,000 gallons per day and met effluent limitations for pH, 1,1,1-Trichloroethane (TCA), Trichloroethene (TCE) and Tetrachloroethene (PCE). The electronic Discharge Monitoring Report (eDMR) for March 2015 is attached to this report.

Maintenance on the tray aeration system will not be complete until the end of April as reported last month. This maintenance was delayed due to an accident that the welder had in February that will keep him out of work for six weeks. Central Wire hired a welder to complete the necessary work. As a result, the flows remained about the same volume in March as in February.

The laboratory analytical report for the pump and treat effluent noted that the groundwater pump & treat effluent samples arrived at the lab on March 19, 2015 at 3.2° C.

The groundwater level monitoring data from downgradient monitoring well DGW-2I continues to be collected. A report and plot of the winter water levels is attached. We retrieved the data logger because Ex. 6 Personal Privacy (PP) has reported that it may begin irrigation in a couple of weeks. Over the four months of December 2014 through March 2015, the groundwater elevation varied between a high on March 1, 2015 of 815.817 feet above MSL to a low of 813.952 feet above MSL on March 17, 2015 for a variation of 1.865 feet.

Summary of Validated Data and Results – The monthly effluent sampling took place on March 18, 2015. The permit limitations and analytical results are shown below.

Central Wire Union Illinois Pump & Treat Discharge Analytical Results

Parameter	Effluent Limitation (Daily Maximum), µg/L	March 2015 Analytical Results, µg/L
1,1,1-Trichloroethane	20	<0.20
Trichloroethene	20	1.1
Tetrachloroethene	20	<0.17

The March NPDES analytical report is attached to this Monthly Progress Report.

In EPA's comment letter on the original March 2015 Monthly Progress Report, they inquired about data in the laboratory report for Well 1 and Well 2. As Mr. Ruopp indicated in his May 7th email, these wells are the two pump & treat extraction wells (shown on the attached map). They are located just north of Highbridge Rd. on either side of North Union

Rd. and marked as EW-1 and EW-2. VOC samples have been collected in these wells on a quarterly basis (since 2007) so we can determine our VOC removal efficiencies.

Regarding the performance of the pump & treat system from 2009 – 2013 (years that separate samples were collected from the two wells up to the preparation of the Central Wire 2012 RCRA Status Report), the influent concentration for the VOCs with effluent limitations in the first eight months of 2013 included two sampling events (March and June). The average influent concentrations were 18, 18 and 31 µg/L for TCE, PCE and TCA, respectively. The average effluent concentrations from the pump & treat system were 0.624, 0.286 and 0.344 µg/L for TCE, PCE and TCA, respectively. These values result in treatment (VOC removal) efficiencies of 97%, 98% and 99% for TCE, PCE and TCA, respectively.

As noted above, these extraction well samples are collected at the end of each quarter at the same time the effluent sample is collected, analyzed by EPA Standard Method 8260B and reported along with the effluent data.

For extraction well 1, the concentrations of the three VOCs - 1,1,1-TCA, TCE and PCE - have generally trended downward from 2009 to 2015. The data since 2009, when separate sample began being collected, through March 2015 along with plots of the data are attached to this report as Figures 2 and 3.

1,1,1-TCA has trended from 54 µg/L to 3 µg/L with no MCL exceedances. TCE has trended from 44 µg/L to 7.9 µg/L with all samples exceeding the MCL. PCE has trended from 17 µg/L to 2.8 µg/L with MCL exceedances from June 2009 to June 2011 and minor bumps over the MCL in December 2013 and June 2014.

For extraction well 2, the VOC concentrations have generally trended upward through December 2012 and generally trended downward since then, but there doesn't seem to be any consistent trend.

1,1,1-TCA has ranged from 81 to 2.9 µg/L with no values exceeding the MCL. TCE ranged from 42 to 1.2 µg/L, with all but the 1.2 µg/L above the MCL. PCE has ranged from 44 to 0.78 µg/L with MCL exceedances in June 2009 and from June 2010 to December 2014.

2. Upcoming Events/Activities Planned – Central Wire will continue to operate the existing remediation systems. Effluent samples will be collected and analyzed as required in our NPDES permit.

Planned maintenance on the tray aeration system should be completed in April, assuming we have some warmer days so the packed tower aerator will not freeze when the system is shut down to complete the maintenance on the tray aeration system.

Central Wire submitted a Work Plan to EPA on April 6, 2015 to better define the leading edge of the chlorinated plume by placing two Geoprobe borings 150 feet and 250 feet

northwest (downgradient) of GP-23 and collect samples at 27 feet, 57 and 85 feet bgs (designated as GP-25 and GP-26). This work will be conducted on April 8 and April 9, if needed.

3. **Anticipated Problem Areas and Recommended Solutions** – None.
4. **Key Personnel Changes** – None.
5. **Target and Actual Completion Dates** – This project has not deviated from the project schedule.